Enabling Educational Institutions' Success in Distance Learning: MERLOT's Facilitation Strategy

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Educational institutions have made significant progress in enabling student success in distance learning through the delivery of academic programs through course management systems, electronic access to library resources, and the wealth of student services using help desks and campus portals. Enabling faculty success in researching and designing curriculum for teaching in distance learning programs is an area where institutions still face significant challenges. This paper will review a number of these challenges and describe how MERLOT (Multimedia Educational Resource for Learning and Online Teaching) is an international consortium designed to facilitate successful teaching and learning with technology.

Teaching: Preparing for Students Learning

There are two major activities that faculty perform in preparation of teaching:

1) Collecting and creating academic content which is the research for teaching.
2) Designing curriculum with content and pedagogy.

The effectiveness and efficiency of faculty being able to perform these activities will contribute significantly to the quality, scalability, and sustainability of an institution's distance education program.

Research for teaching requires faculty to search and find content provided by commercial publishers, libraries, and individuals (e.g. via the worldwide web). Faculty also develop their own content to complement the resources produced by others, including syllabi, lectures, units of practice, and learning objects. The critical success factors for faculty doing research for teaching include the ability to identify the relevant content within their academic discipline, the ability to customize the content to satisfy local, programmatic requirements, and the ability to participate in a community of practice for teachers. If faculty cannot effectively and efficiently determine the relevance of materials for teaching in their discipline, the process for searching, finding, evaluating, and selection of content will be overwhelming, unreliable, and of poor quality. If faculty cannot effectively and efficiently customize the content, the collection of content may not meet the needs of the students within their specific academic program. Finally, if the faculty cannot participate in a community of practice for teaching, the professional development opportunities for innovation, improved effectiveness, recognition, and feedback will be insufficient to develop and sustain updated knowledge for teaching the discipline.

Designing curriculum requires faculty to organize the content with pedagogies. Curriculum design requires the faculty to add a programmatic and cultural context to their collected content. This context includes defining the learning objectives, the prerequisite skills and knowledge, the learning activities, and assessments. The critical success factors for faculty composing curriculum are again identifying the relevant content and pedagogy for the students' capabilities and learning objectives, customizing the learning activities and assessments in ways appropriate for the students and the academic program goals, and participating in the community of practice for teachers. Ineffective and inefficient curriculum design processes does not produce the desired student learning outcomes and can lead to irrelevant and boring curriculum which doesn't engage the students at their readiness to learn. As with research for teaching, if the faculty cannot participate in a community of practice for teaching, the professional development opportunities for innovation, improved effectiveness, recognition, and feedback will be insufficient to develop and sustain excellence in teaching skills and curriculum design

Preparing for Teaching in Distance Learning Programs

Faculty face significant challenges when they research and design curriculum for teaching in distance learning programs. These challenges are in addition to the many issues of technology infrastructure, access to computing technologies by students and teachers, and administrative systems for managing students learning at a distance. Commercial publishers and libraries do not provide a deep or broad or organized collections of multimedia academic content, though electronic access to text-based resources is advancing rapidly. A large proportion of the multimedia content has been developed by a cottage industry of individual faculty, academic technology staff, campus technology centers and professional organizations. Locally developed and managed digital collections of multimedia content are developing yet are at early stages of reliability, sustainability, and quality. Consequently, faculty can have significant difficulty researching and designing curriculum for teaching in distance learning programs.

While these challenges are significant, distance learning programs have also created opportunities for educational communities to respond collaboratively to a number of these challenges. The time and expense for developing and distributing digital content can be reduced if there is more effective sharing of digital content. Assuring the quality of the content and its use with sound pedagogy is another critical aspect on distance learning that can be addressed through collaboration by establishing evaluation standards and sharing reviews by peers. Professional development programs that enable the academic community to use digital resources successfully can be delivered through the collective discovery and sharing of exemplary practices. Development and management of technology services supporting the sharing of digital resources and professional development programs are pivotal in establishing and sustaining the communities of practice in distance learning.

MERLOT was designed and has evolved to enable educational institutions to overcome the chal-

lenges of researching and designing curriculum for teaching in distance learning programs. By collaboratively designing, building, evaluating and managing a shared digital collection of multimedia academic content, MERLOT enables faculty to perform effective and efficient research for teaching. By building in the capabilities for faculty to customize and contextualize the academic content, MERLOT enables faculty to design curriculum effectively and efficiently. Finally, by building the MERLOT digital library on the foundation of the community of users, MERLOT enables faculty to participate in communities of practice for teaching with technology. The following sections will review the development of the MERLOT consortium, its digital collection and services, and its strategies for facilitating the success of higher education institutions around the world. The principle of facilitation is to enable others to succeed and the paper will illustrate how this principle drives MERLOT.

Historical Context Shapes MERLOT Today

In 1996, the California State University Center for Distributed Learning (CSU-CDL at www.cdl.edu) was established to serve the academic technology needs of its 23 campuses. With over 30,000 faculty and over 350,000 students in the CSU system, the CSU-CDL had to design a service that would be easy to use, would leverage the widespread yet uncoordinated development of academic technologies, and would be low cost to operate. Under the leadership of Chuck Schneebeck, CSU-CDL's Director, MERLOT (www.merlot.org) was developed and free access was provided in 1997. MERLOT was modeled after the NSF funded project, "Authoring Tools and An Educational Object Economy (EOE)" which was led by Dr. James Spohrer and hosted by Apple Computer, and other industry, university, and government collaborators. The EOE continues to develop and distribute tools to enable the formation of communities engaged in building shared knowledge bases of learning materials. (www.eoe.org). One of the key design requirements for MERLOT was to have a technology service that enables users to contribute directly to a community's collection of online resources without "human mediation". Enabling the "cottage industry" of campuses and individual faculty's development of academic technology to become scalable and sustainable was the goal for MERLOT (Hanley, Schneebeck, & Zweier, 1998; Schneebeck and Hanley, 2001)

In 1998, a State Higher Education Executives Organization / American Productivity and Quality Center (SHEEO / APQC) benchmarking study on faculty development and instructional technology selected the CSU-CDL as one of six best practices centers in North America. Visitations to the CSU-CDL by higher education institutions participating in the benchmarking study resulted in institutional interest in collaborating with the CSU on the MERLOT project. The University of Georgia System, Oklahoma State Regents for Higher Education, University of North Carolina System, and the California State University System created an informal consortium representing almost one hundred campuses. SHEEO was the coordinator for the cooperative of the four state systems.

In 1999, the four systems recognized the significant benefits of a cooperative initiative to expand

the MERLOT collections, conduct peer reviews of the digital learning materials, and add student-learning assignments. Each system contributed funds to develop the MERLOT software and in-kind support to advance the peer review process. The CSU maintained its leadership of and responsibilities for the operation and improvement of processes and tools.

In January 2000, the four systems sponsored faculty from the disciplines of Biology, Physics, Business and Teacher Education to develop evaluation standards and peer review processes for on-line teaching-learning material. In April 2000, other systems and institutions of higher education were invited to join the MERLOT cooperative and by July 2000, twenty-three (23) systems and institutions of higher education had become Institutional Partners of MERLOT.

Facilitating Collaboration Across Borders

Today, the MERLOT consortium is composed of over 20 higher education systems, consortia, individual institutions of higher education, over 20 professional academic organizations, and over 15,000 individuals to form a community of people who strive to improve the teaching and learning experience with high quality online resources (as of September 2003). The consortium is a diverse and complex mix of institutions and there are multiple levels of participation. MERLOT's institutional partners include smaller liberal arts colleges and large state university systems and well as community colleges focused on undergraduate teaching and research institutions focused on scholarship, research, and graduate education. For institutions of higher education, MERLOT has 4 levels of participation:

- Sustaining Partners pay $50,000 per year and provide over $250,000 in in-kind support
- System Partners pay $25,000 per year and provide approximately $50,000 in in-kind support
- Campus Partners pay $6,500 per year and provide approximately $20,000 in in-kind support
- Institutional Alliances provide in-kind support for advancing the MERLOT project within their institution

Collectively, MERLOT provides services that require approximately $3 million annually but no institution has to provide the full funding. The "return on investment" is one of the factors that motivates institutions to join the consortium. The different levels of participation are associated with different levels of MERLOT services; the more an institution commits to MERLOT, the more MERLOT commits its services to the institution. These different levels enable institutions to participate within the constraints acceptable for their institutional culture, resources and readiness. MERLOT has 19 System and Campus Partners in the US, California State University and eduSource.Canada are Sustaining Partners, and education.au, which provides academic technology services (EdNa Online) to education institutions throughout Australia, and the National University of Rwanda are alliance partners. Whether the borders are the campus property lines or the international dateline, higher education institutions can participate in MERLOT's consortium. MERLOT's responsibility is to facilitate a productive community and to engage the consortium members in shared governance and program im-

plementation through open communications, cooperative planning and program delivery.

Though the consortium members are very diverse, they share the commitment to MERLOT's vision to be a premier online community where people from around the world share online learning materials and pedagogy. They also share MERLOT's strategic priority to improve the effectiveness of teaching and learning by expanding the quantity and quality of peer-reviewed online learning materials that can be easily incorporated into faculty-designed courses is also shared across the diverse members. It is the combination of shared values, the collaborative delivery of quality services, and the public recognition of the partners' contributions to MERLOT that sustains the MERLOT consortium.

Serving Common Needs Across Borders: Easy Access to Quality Digital Content, Pedagogy, and Peer-to-Peer Interactions

Without the delivery of high quality services, the MERLOT consortium would quickly dissolve. MERLOT's services address the difficulties that institutions of higher education and their faculty experience when fulfilling the promises and challenges of technology-enhanced education. Higher education makes regular and substantial investments in the development of instructional technology amidst concerns that someone else may be "reinventing the wheel". Duplication of effort wastes time, staff resources, and funds. Faculty have difficulty reliably producing high-quality online materials, efficiently choosing online materials, receiving appropriate professional recognition for their work, and providing evidence of improvements in teaching and learning. MERLOT's community digital library and services are designed to meet these common needs.

The MERLOT Collection:

MERLOT and its institutional and individual members have created a digital library of about 10,000 online teaching / learning materials and a directory of over 15,000 members who can provide peer-to-peer consultation (as of September, 2003). The MERLOT website (www.merlot.org) is a cooperatively developed, free, web-based resource where faculty, staff, administrators and students can easily find digital learning materials with evaluations and guidance for their use. In 2003, the website had over 1.5 million hits per month with over 15,000 unique users per month. Learning materials from a wide variety of academic disciplines are indexed on the MERLOT site. Most of the learning materials found on www.MERLOT.org are modular (e.g., simulations, tutorials, animations, drill and practice exercises, lecture presentations, case studies, collections, and reference materials) designed to be integrated into a larger course. Most of the materials run inside a web browser, facilitating the use within an online course, or as assignments to students outside the classroom.

MERLOT is designed for easy and effective navigation. Whether users browse the collection or search for targeted learning materials, they will be able to read a preview of the material to help them decide if it's worth their time to investigate the materials more thoroughly. MERLOT does not store

the thousands of actual learning materials on its servers but simply provides the links and descriptions of the materials (metadata). Once the materials are found in MERLOT, users simply click on the url for the materials, taking them to material's actual location where they can check for any licensing regulations or costs involved with use, and can incorporate the resources into their curriculum (e.g. enter a link to the material in their course web site, or e-mail the URL to the students). To find or use materials in the MERLOT collection, users do not need to be a member of MERLOT nor does the user's institution need to be in the MERLOT consortium. This feature of "on-demand" access is a founding principle of MERLOT; it enables faculty to solve their research and curriculum design problems immediately.

MERLOT has recently provided a federated search service that enables users to search MERLOT and other digital libraries simultaneously and provide an integrated hit list. This federated search service provides one-stop-access to collections developed by different communities around the world; MERLOT and Australia's EdNA Online are using the federated search services to leverage each other's collections in the service of their own constituents.

The Collection Built by the Community:

A distinctive feature of MERLOT is that individual members perform the cataloging of materials voluntarily. Once a person registers as a member of MERLOT (at no charge), they are able to create catalog records of materials they deem worthy of sharing. Every contributed material, comment, review, or assignment is visibly connected to the individual in their MERLOT ePortfolio, which creates some social pressures for members to apply reasonable judgment. It also provides a mechanism for MERLOT to identify and discipline members for abusing their privileges. A premise underlying MERLOT's decision to open the cataloging to the community is that if a faculty member, staff, librarian or administrator is qualified enough to be hired by a higher education institution, they are qualified to identify materials that might be valuable to their peers. In addition, if a user is concerned about the qualifications of the person submitting the materials, they click on the name of the submitter and learn more about them.

Cataloging by the community enables MERLOT to grow the collection in breadth and depth that is directly meeting the needs of its members. As the community becomes more diverse in its interests, the collection can grow to satisfy the interests. Members of different cultures and nationalities can contribute materials without having to satisfy gate-keeping requirements that could be culturally insensitive. The process for building the collection is also scalable; if every one of MERLOT's members contributed one material this year, the collection would grow by 15,000, without MERLOT having to hire staff to catalog the materials. The workload cost to catalog one material is low compared to the benefit of 15,000 new materials that would be available to every member. Materials in any language can be contributed to MERLOT; using the ISO 639-1 code, the language becomes part of the

catalog record. This capability enables users to search for and contribute materials in specific languages. Both the community cataloging process and the cataloging by language enables cross-cultural learning communities to develop and thrive.

Pedagogical Contexts for Learning Content:

There are a number of critical features to MERLOT that makes it more than a collection of urls. The individual members of MERLOT write description of the materials within the context of teaching and learning. Members can add comments about the quality and use for the materials. MERLOT also provides the capability for members to describe specific techniques for using the materials in teaching; the Learning Assignments includes information about the topics covered, the level of student (e.g. lower division, upper division, graduate), names of courses for which it is appropriate, pre-requisite skills and knowledge the students should have before doing the assignment, learning objectives, type of learning activity (e.g. team-based vs. individual; supervised vs. unsupervised), assessment methods, time required to do the assignment, and the text of the assignment. All the metadata on pedagogy enables faculty to effectively and easily choose and use the best online learning materials for their students that are compatible with their own teaching methods and the learning goals of their academic program.

Language is one barrier for international collaboration and MERLOT providing the capability to contribute and search for materials in different languages is one step to overcome this barrier. There are also a variety of cultural contexts that separate teachers around the world. For MERLOT to truly support the international education community, it must enable users to provide their cultural context for using multimedia materials in their curriculum. Because MERLOT provides the capability for any member to contribute the description of the materials, member comments, evaluations, and assignments, the "same" learning content can be augmented with multiple cultural learning contexts. For example, a Japanese faculty who authored a civil engineering simulation could catalog his online materials into MERLOT, providing his engineering students both the engineering content and the cultural context for Japanese architecture and civil policies. A faculty in a Canadian university who teaches Japanese could add a learning assignment for her students to translate the text of the civil engineering simulation and identify the cultural context for Japanese architecture. In summary, the members of MERLOT enrich the cross-cultural dimensions of academic content and easily share their creativity and innovations with the rest of the world.

Personalizing the MERLOT Collection:

MERLOT recognized that people can easily get overwhelmed by the volume of available materials and easily forget the value and relevance of materials they find. Consequently, MERLOT created the capability for its members to create and annotate Personal Collections. Once a member finds material that satisfies their needs, with a click of a button, they can add it to their Personal Collection and

describe what and why they found the material valuable. Members can create multiple Personal Collections that can form the foundations of course portfolios, where the faculty can describe how the selected materials can be used to achieve specific learning objectives. A critical aspect of the Personal Collections is that the member defines the pedagogical and / or personal context for selecting and using the materials. The ability of users to contribute their context for the materials enables the user of any country, culture, or language to share their knowledge and purposes for using the online materials.

Access to the MERLOT Community:

Though the collection of online materials facilitates the research and design of curriculum, it is MERLOT's directory of members that facilitates participation in the community of practice. The Member Directory contains contact information, academic areas of expertise, and an ePortfolio of the members' contributions of materials, comments, and assignments to MERLOT. As presented earlier, the Personal Collections are also part of the member's ePortfolio. The directory enables individuals to find and communicate with colleagues who might advise them on the effective use of digital resources. If a faculty finds a resource that they want to use in their class, they could contact the author of the materials, the person who contributed the description, and / or the person who wrote a member comment or assignment. The close connections between the academic content and the people who have used the content reduce the isolation of faculty and provide opportunities for dialogue, feedback, collaboration, and mentoring.

Community Management of Collection Quality

With the MERLOT collection being build by its members, there's a question of how the quality of the collection is managed. MERLOT conducts peer review of online materials in the collection, a process that helps insure that learning materials within the MERLOT collection are contextually accurate, pedagogically sound, and technically easy to use. MERLOT has modeled its peer reviews on the discipline-based peer review of scholarship and research (Hanley & Thomas, 1998; Hanley, 2003). MERLOT's peer review process also provides a mechanism for professional recognition for faculty developing and using instructional technology. The network of peer review is also crossing borders; MERLOT's partnership with eduSouce.Canada is designing a peer review process to support Canadian discipline-communities.

The review and management of the collection is the responsibility of MERLOT's Editorial Boards. Currently, MERLOT has 13 discipline-based: biology, business, chemistry, engineering, health science, history, information technology, math, music, physics, psychology, teacher education, and world languages. MERLOT's Teaching and Technology Editorial Board is building and reviewing an interdisciplinary collection to support the effective integration of technology in teaching and learning. Part of the commitment a MERLOT institutional partner makes is to support faculty participation

on the Editorial Boards. With each partner supporting approximately 5 faculty, MERLOT has a workforce of over 100 faculty. The criteria used to appoint members of the Editorial Board by the partnering systems and institutions are: 1) expertise in the discipline, 2) excellence in teaching, 3) experience in using technology in teaching and learning, and 4) connections with their disciplines professional organizations.

The MERLOT strategy is to use the institutions of higher education to help establish the Editorial Boards and then share the responsibility for the peer review with professional discipline organizations. MERLOT provides a variety of tools and processes to insure the integrity and manage the efficiency of the peer review process, including the training of peer reviewers and process controls on the evaluation of the materials. MERLOT also provides conference calls, listserv's, threaded discussions and password-protected websites for posting documents, enabling the Editorial Boards to communicate and coordinate their work in a secure environment. Editors coordinate the workload among the faculty as they perform the reviews, add materials to the collection, and design the collection's categorization scheme.

Peer Review Process

The peer review process begins with the Editorial Board triaging part of the collection in their discipline to determine which materials are worthy of the intensive review process. Once identified, the material is reviewed by two trained peer reviewers who have the relevant expertise. Faculty reviewers write individual evaluations, and then send the reports to the Editor who integrates them into a single report. During the peer review process, the Editor Board members are in communication with the author of the material.

The outcome of the peer review process is a report containing a description of the learning goals, the targeted student population(s), prerequisite knowledge and skills, the type of learning material included (simulation, animation, tutorial, quiz, lecture / presentation, collection, reference material), a summary of the procedures for using the software, the technical requirements needed, and an evaluation of the quality, potential effectives for teaching and learning, and usability. Additionally, the comments and recommendations for the author are included.

Evaluation Standards:

The Editorial Board members are provided three (3) evaluation standards for use when assessing the on-line learning materials. These standards are operationalized in ways appropriate for each discipline. The three evaluation standards are:

1. *Quality of Content*: The learning materials must present valid (correct) concepts, models, and illustrations. To evaluate the validity of the content, the reviewers rely on their particular expertise. Quality of content also means that the learning materials present educationally

significant concepts, models, and skills for the discipline. To evaluate the educational significance of the content, reviewers decide if the content is part of the core curriculum within the discipline, difficult to teach and learn, and / or is a pre-requisite for understanding more advanced material in the discipline.

2. *Potential Effectiveness for Teaching and Learning*: Determining the effectiveness of the material requires the actual use of the digital learning materials by both students and faculty, and a systematic assessment of the outcomes. Evaluation of the potential effectiveness of the material requires the reviewers to judge the materials based upon their expertise as a teacher. The reviews determine if the materials are likely to improve teaching and learning, given the ways the faculty and students could use them. The reviewers are provided an established set of principles to follow to determine if the material is appropriate according to the standards of MERLOT.
3. *Ease of Using the Material*: Evaluating how easy it is for teachers and students to use the digital learning materials for the first time is the primary feature of this standard. MERLOT provides a summary of the appropriate usability standards to follow as a guideline. The standards are based on Nielson's (1993) heuristics for good instructional design.

Complementing Peer Reviews with Member Comments

While peer reviewers require training and appointments by MERLOT, anyone who is an individual member of MERLOT can contribute Member Comments. The user-centered review process has precedence in a number of highly used websites, such as Amazon.com, and will allow individuals to provide their observations and evaluations on the learning materials within MERLOT. Members are asked first to describe how they reviewed the materials (e.g. 5 minutes browsing or used it in teaching a course) and then asked to evaluate the quality of the content, effectiveness for teaching and learning, and ease of use.

In summary, the MERLOT collection, reviews, comments, assignments, Personal Collections, and ePortfolios enable faculty to effectively and efficiently choose materials for teaching, customize the materials within the design of their curriculum, and participate in professional development activities within communities of practice.

Institutional and Individual Readiness

The success of any program is determined in large part on its ability meet the immediate needs of the institution and individual. MERLOT provides services that can meet the immediate needs for research and curriculum design in distance learning programs. MERLOT continues to serve the needs and capabilities of institutions and individuals as they mature. For those that need to simply explore and find digital content, MERLOT provides a very low threshold of effort to succeed. For those that need instruction on how to use digital content in teaching and learning, MERLOT provides a pro-

fessional development program. The annual MERLOT International Conference provides many opportunities for professional development. The MERLOT Faculty Development Workshop provides its Institutional Partners an intensive training program for their staff to learn how to implement MERLOT at their campuses. For those that want to demonstrate leadership in academic technology, MERLOT provides opportunities, resources, and participation in the strategic directions of MERLOT. MERLOT conducts a variety of planning and training meetings for its Project Directors' Council, Editors' Council, and Advisory Board as it continuously shapes its future.

Technology, Teaching and Tenure

One of the pervasive issues for both faculty and administration is the recognition and reward for effective teaching with technology within the hiring, retention, tenure, and promotion process. The disconnection between stated priorities for using technology and the policies and practices for personnel evaluation is a major barrier to effective and sustained use of technology in teaching and learning. For those institutions that are ready to align priorities with policies and practices, MERLOT provides a means to their success.

Guidelines for evaluating technology in instruction are being published by professional societies and institutions.

- Conference on College Composition and Communication
  http://www.hu.mtu.edu/~cyselfe/P&TStuff/P&TWeb/Introduction.htm
- Modern Language Association http://www.mla.org/reports/ccet/ccet_frame.htm
- American Association for History and Computing
  http://www.theaahc.org/tenure_guidelines.htm
- Duquesne University http://www.tltgroup.org/resources/rduqten.html
- University of Michigan http://www.personal.umich.edu/~cberger/FacultyRecandReward.doc

There are a number of common principles emerging from these evaluation guidelines. Peer evaluation and testimony by experts in the field are required to verify quality and importance of the materials to the discipline. The digital scholarship should be made "visible" to the professional community. Candidates should provide electronic portfolios for review instead of evidence files of the crime of doing good work. The evaluation of the materials should be performed in the medium in which the scholarship was created. MERLOT provides campus administration, review committees, and candidates resources and tools to implement these evaluation guidelines. MERLOT's peer reviews are performed by an independent panel of experts who have been trained to reliably apply a standards-based evaluation process. Administrators, committees, and candidates can use the peer reviews as external reviews validating the quality and significance of the candidate's digital scholarship. MERLOT provides an international venue to make the digital scholarship visible and enables the profession community to evaluate, use, augment, and reference in their Personal Collections. Finally, MERLOT provides documentation for the quality and quantity of digital scholarship contributions faculty make

through the ePortfolios and with letters of recognition.

In conclusion, MERLOT's own success is determined by its ability to facilitate different educational institutions' success, as measured by local variables, through shared and customized services. It is through the expanding collaborative participation in an international community, that individuals and institutions will be able to more effectively and efficiently prepare their teachers to design and deliver effective, innovative, and customized distance learning programs that will grow with and sustain the educational needs of the world's population.

References

Hanley, G.L., Schneebeck, C., & Zweier, L. (1998). Implementing a scaleable and sustainable model for instructional software development. *Syllabus*, 11(9), pp30-34.

Hanley, G.L, & Thomas, C. (2000) MERLOT: Peer Review of Instructional Technology, Syllabus, v14, no. 3, 16-20.

Hanley, G.L. (2001) Designing and Delivery of Instructional Technology. A Team-based Approach. In *Technology-Enhanced Learning: A guide to Engaging and Supporting Faculty*, C. Barone & P. Hagner (Editors), Jossey-Bass Inc.

Schneebeck, C. & Hanley, G. L. (2001) "The California State University Center for Distributed Learning". In Epper, R.M. and Bates, A.W. (Eds.) Teaching Faculty How to Use Technology: Best Practices from Leading Institutions. Westport, CT: Greenwood / Oryx Press.